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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/642,622

08/19/2003

Takeshi Tsuyuki

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22428

7590

09/07/2004

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EXAMINER

MCCALL, ERIC SCOTT

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/642,622	Applicant(s) TSUYUKI ET AL.	
	Examiner Eric S. McCall	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 15-17 is/are rejected.
- 7) ☒ Claim(s) 4-14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/19/03</u> . | 6) <input type="checkbox"/> Other: ____. |

MONITORING OF FUEL VAPOR PRESSURE

FIRST OFFICE ACTION

SPECIFICATION

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. The Applicant's cooperation is requested in correcting any errors of which the Applicant may become aware of in the specification.

CLAIMS

35 U.S.C. § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, and 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamaguchi et al. (2002/0129643).

With respect to independent claims 1, 16, and 17, Yamaguchi et al. teach a fuel vapor pressure monitoring device/method monitoring a pressure increase in a purge vent between a fuel tank and an intake passage of an engine, in a sealed state, the device comprising:

- a sensor (26) which detects a pressure in the purge vent; and

- a programmable controller programmed to:

- calculate a pressure variation in the purge vent (page 5, paragraph 60);

- calculate an error equivalence amount from the pressure variation in the purge vent, the error equivalence amount corresponding to an error amount in the pressure in the purge vent in the sealed state due to sloshing in the fuel tank (page 5, paragraph 62);
- and

- calculate a corrected pressure which corresponds to a pressure when sloshing does not occur, from the pressure in the purge vent in the sealed state and the error equivalence amount (page 1, paragraph 10).

With respect to claim 2, the claimed subject matter thereof is inherent in the teaching of Yamaguchi et al.

With respect to claim 3, Yamaguchi et al. disclose in Fig. 1 thereof a purge vent comprising a first passage connected to the fuel tank, a canister connected to the first passage, the canister comprising a filter adsorbing fuel vapor and a vent hole opening to the atmosphere, a second passage connecting the canister with the intake passage, a drain cut valve which can close the vent hole and a purge control valve which can close the second passage, and the controller is further programmed to seal the purge vent by closing the drain cut valve and the purge control valve as claimed.

With respect to claim 15, Yamaguchi et al. suggest a controller which is programmed to apply a correction for a “quantization” error (interpreted as meaning a measured error) resulting from quantizing (ie. measuring) the pressure detected by the sensor when calculating the error equivalence amount from the pressure variation in the purge vent (page 1, paragraph 10).

Allowable Subject Matter

Claims 4-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 4 (and thus claims 5-9) has been found to contain allowable subject matter because the prior art fails to teach or suggest the combination of the controller being programmed to update a minimum value for the pressure change rate, calculate a difference of the minimum

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value and the pressure change rate, and calculate the error equivalence amount based on a time integral of the difference.


Claim 10 (and thus claims 11-14) has been found to contain allowable subject matter because the prior art fails to teach or suggest the controller being further programmed to determine whether or not a fixed vapor monitoring period has elapsed in a sealed state, and calculate the corrected pressure when the fixed vapor monitoring period has elapsed, as a vapor monitoring period temperature increase correction amount expressing a pressure variation resulting from a temperature variation during the vapor monitoring period.

RELEVANT ART

The Applicant's attention is directed to the enclosed "PTO-892" form for the prior art made of record and not relied upon but considered pertinent to the state of the art of the Applicant's disclosure.

CONCLUSION

Any inquiry concerning this communication should be directed to Eric S. McCall at telephone number (571) 272-2183.


ERIC S. McCALL
PRIMARY EXAMINER

9/03/04